

Applicants: Bernard Raaf, et al.  
Serial No. : 09/786,738  
Filed : March 8, 2001  
Page : 4

Attorney's Pocket No.: 12758-006001

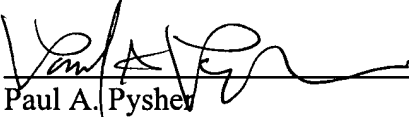
REMARKS

Entry hereof and early passage to issue are respectfully requested. Applicants' undersigned attorney can be reached at 617-521-7896.

No fee is believed to be due for this Preliminary Amendment. However, if any fee is due for this or the accompanying Information Disclosure Statement, please apply it to deposit account no. 06-1050.

Respectfully submitted,

Date: December 19, 2001

  
Paul A. Pyshev  
Reg. No. 40,780

Fish & Richardson P.C.  
225 Franklin Street  
Boston, Massachusetts 02110-2804  
Telephone: (617) 542-5070  
Facsimile: (617) 542-8906

VERSION WITH MARKINGS TO SHOW CHANGES MADE

- 1. (Amended) A method for synchronizing [synchronization of] a base station [(BS)] to a mobile station [(MS)], [in which] comprising:

[the base station] transmitting [transmits] a signal sequence K(i) of length n from the base station to the mobile station, [which can be formed in such a way that (lacuna),] the signal sequence K(i) comprising:

[- in which] a second signal sequence element K2(k) of length n2 [is] repeated n1 times and [, in the process, has] a modulated first signal sequence element K1(j) of length n1 [modulated onto it,];

wherein [- in which] n1 is equal to n2, and [- in which this] the signal sequence K(i) is determined in the [a] mobile station.

2. (Amended) The method as claimed in claim 1, wherein [in which] n is equal to 256, n1 is equal to 16, and n2 is equal to 16.

3. (Amended) The method as claimed in claim 1, further comprising forming [one of the preceding claims, in which] the signal sequence K(i) [is formed] by modulating [modulation of] the second signal sequence [element] K2(k) as follows [in accordance with the following rule]:

$$K(i) = K2(i \bmod n2) * K1(i \div n2).$$

4. (Amended) The method as claimed in claim 1, wherein [one of the preceding claims, - in which] the [predetermined] signal sequence K(i) is contained in a received signal sequence E(1) and is determined in the mobile station by establishing a [the] correlation sums S of the signal sequence K(i) with corresponding sections of the received signal sequence E(1), [with -] a partial correlation sum sequence TS(z) of the signal sequence element K2(k) being determined using [with] corresponding parts of the received signal sequence E(1) [being calculated], and [-] n1 elements of the partial correlation sum sequence TS(z) being selected in order to calculate the

[a] correlation sum  $S[,]$  and being multiplied by the signal sequence element  $K1(j)$  [in the sense of a scalar product].

5. (Amended) The method as claimed in claim 4, further comprising selecting [in which]  $n1$  in each of [case]  $n2$ -th elements of the partial correlation sum sequence  $TS(z)$  [are selected] in order to calculate the [a] correlation sum  $S$ .

6. (Amended) The method as claimed in claim 1, wherein [one of claims 1, 2 or 3], [- in which] the [predetermined] signal sequence  $K(i)$  is contained in a received signal sequence  $E(1)$  and is determined in the mobile station by establishing a [the] correlation sums  $S$  of the signal sequence  $K(i)$  with corresponding sections of the received signal sequence  $E(1)$ , [with] and wherein [-] a partial correlation sum sequence  $TS(z)$  of the signal sequence [element]  $K1(j)$  is determined using [with] selected elements of the received signal sequence  $E(1)$  [being calculated], and [-]  $n2$  elements of the partial correlation sum sequence are [ $TS(z)$  being] multiplied by the signal sequence element  $K2(k)$  [, in the sense of a scalar product,] in order to calculate the [a] correlation sum  $S$ .

7. (Amended) The method as claimed in claim 6, further comprising selecting [in which]  $n1$  in each of [case]  $n2$ -th elements of the received signal sequence  $E(1)$  [are selected] in order to calculate a partial correlation sum  $TS$ .

8. (Amended) The method as claimed in claim 4, further comprising storing [one of claims 4 to 7, in which calculated] partial correlation sums  $TS$  [are stored,] and using the partial correlation sums  $TS$  [are used] in order to determine [calculate] a further correlation sum  $S$ .- -